

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
28 April 2005 (28.04.2005)

PCT

(10) International Publication Number
WO 2005/037805 A2

(51) International Patent Classification⁷: C07D 285/00

(21) International Application Number:
PCT/JP2004/014540

(22) International Filing Date:
27 September 2004 (27.09.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
2003-354758 15 October 2003 (15.10.2003) JP

(71) Applicant (for all designated States except US): SUM-
ITOMO CHEMICAL COMPANY, LIMITED [JP/JP];
27-1, Shinkawa 2-chome, Chuo-ku, Tokyo 104-8260 (JP).

(72) Inventors; and

(75) Inventors/Applicants (for US only): IHARA, Hideki
[JP/JP]; 3-2-4-301, Moto-machi, Naniwa-ku, Osaka-shi,
Osaka, 5560016 (JP). TAKAOKA, Daisuke [JP/JP];
8-7-20-322, Hon-machi, Toyonaka-shi, Osaka, 5600021
(JP). MIZUNO, Hajime [JP/JP]; 2-10-3-312, Sonehi-
gashino-cho, Toyonaka-shi, Osaka, 5610802 (JP).

(74) Agents: ENOMOTO, Masayuki et al.; c/o Sumitomo
Chemical Intellectual Property Service, Limited 5-33, Kita-
hama 4-chome, Chuo-ku, Osaka-shi, Osaka, 5418550 (JP).

(81) Designated States (unless otherwise indicated, for every
kind of national protection available): AE, AG, AL, AM,
AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG,
KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG,
MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH,
PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN,
TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

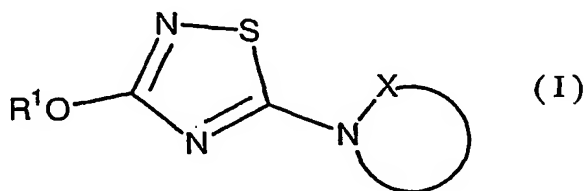
(84) Designated States (unless otherwise indicated, for every
kind of regional protection available): ARIPO (BW, GH,
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,
ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,
FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI,
SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ,
GW, ML, MR, NE, SN, TD, TG).

Published:

— without international search report and to be republished
upon receipt of that report

For two-letter codes and other abbreviations, refer to the "Guid-
ance Notes on Codes and Abbreviations" appearing at the begin-
ning of each regular issue of the PCT Gazette.

(54) Title: 1,2,4-THIADIAZOLE COMPOUNDS AND PESTS CONTROLLING COMPOSITION CONTAINING THE SAME



represents a halogen atom, trifluoromethyl or C1-C4 alkyl, and R4 represents a fluorine atom or C1-C3 alkyl. The 1,2,4-thiadiazole compound has an excellent pests controlling activity, and can effectively control an pests such as insect pests, acarine pests and the like.

(57) Abstract: The present invention relates to a 1,2,4-thiadiazole compound of the formula (I) represented by the formula (1): wherein R₁ represents C3-C7 alkynyl and X represents C4-C7 straight alkylene optionally substituted with one to four of R₂, C4-C7 straight alkenylene optionally substituted with one to four of R₂, ethylene-oxy-ethylene optionally substituted with one to four of R₄, or ethylene-thio-ethylene optionally substituted with one to four of R₄.